

Remarks

Applicants have read and considered the Office Action dated July 30, 2003 and the references cited therein. Claims 1, 28 and 30 have now been amended. New claims 41 and 42 have been added. Claims 1-42 are currently pending.

In the Action, claims 1, 3, 9-10, 12-15, 17-20, 23-32 and 37-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of Suzuki. Applicants respectfully traverse the rejection. The Action stated that Takahashi discloses a stereoscopic device and method for producing a sequence of stereoscopic images comprising a sensor assembly having an optical axis for detecting a sequence of stereoscopic images of an object, a movement value detecting means for detecting a magnitude of adjusting the zoom optical system and a processing unit connected to the sensor assembly and to the movement value detecting means, wherein the processing unit outputs stereoscopic images according to a signal received from the movement value detecting means, thereby producing a visually stable sequence of display images. The Action states that Takahashi fails to disclose a movement detector for detecting the sensor assembly perpendicular to the optical axis, relative to the object, the processing unit being connected to the movement detector, and the processing unit selecting portions of the stereoscopic images according to a signal received from the movement detector.

The Action asserts that Suzuki teaches a system and method comprising a movement detector in Figures 3 and 5 for detecting the sensor assembly perpendicular to the optical axis. The Action notes that a direction of movement comprises moving up, down, left and/or right, which means the directions are perpendicular to the original optical axis. The Action asserts that Suzuki teaches a processing unit in Figures 3 and 6 connected to the sensor assembly and to the movement detector, wherein the processing unit selects portions of the images according to a signal received from the movement detector. The Action asserts that it would have been obvious to one of ordinary skill in the art to employ the stereoscopic device and method as taught by Takahashi to incorporate the sensor assembly, movement detector and the processing unit taught

by Suzuki's prior art so that the movement detector detects the sensor assembly perpendicular to the optical axis and the processing unit connects to the sensor assembly and to the movement detector, wherein the processing unit selects portions of the images according to the signal received from the movement detector. The Action further asserts that it would have been obvious to produce a processing unit that connects to the sensor assembly and to the movement detector, wherein the processing unit selects portions of the stereoscopic images according to the signal received from the movement detector, in order to compensate for the shake/vibration of the sensor assembly, thereby producing a visually stable sequence of display images.

Applicants respectfully assert that the characterization is incorrect, the movement detector shown in Figures 3 and 5 of Suzuki and the processing unit, shown in Figures 3 and 6 are not understood. As Suzuki includes only four Figures, the Office Action is erroneous in referring to Figures 5 and 6. Moreover, Applicants have reviewed column 5, lines 37-42, which states, "The fluctuation detector 5 is composed of a microprocessor and the like for computing an amount of movement and a direction of movement, namely, an amount of fluctuation and a direction of fluctuation of image pickup device (video camera) on the basis of a movement signal Ss output from an acceleration sensor and the like." Applicants note that the language of Suzuki fails to define in any way the direction movement. Suzuki merely recites a direction of movement and it is not clear whether it is along the optical axis or skewed at some nonperpendicular angle to the optical axis. Applicants assert that the characterization in the Office Action that a direction of movement comprises moving up, down, left, and/or right which means the directions are perpendicular to the original optical axis is not supported. Applicants find no basis for such an assertion and assert that Suzuki does not anticipate the recited limitations of the claims.

Moreover, Applicants assert that the combination of the references would not arrive at the present invention. Takahashi does not teach or suggest correction for vibration of stereoscopic images. Suzuki teaches only a method correcting image fluctuation. Suzuki is silent as to any

type of image such as a stereoscopic image. Moreover, claims 1 and 30 have been amended and further distinguish over the cited references. Although the Office Action asserts that it would be "obvious to produce a processing unit that connects to the sensor assembly and to the movement detector wherein the processing unit selects portions of the stereoscopic images according to the signal received from the movement detector in order to compensate for the shake/vibration of the sensor assembly, thereby producing a visually stable sequence of display images." Applicants assert that the further modification of even the combined Takahashi and Suzuki references is not obvious to one of ordinary skill in the art. Moreover, Applicants assert that the contention in the Office Action that it would have been obvious to incorporate the sensor assembly, movement detector, and the processing unit as taught by Suzuki and then modifying the movement detector so that it detects a sensor assembly perpendicular to the optical axis and the processing unit connects to the sensor assembly and to the movement detector with the processing unit selecting portions of the images according to the signal received from the movement detector would not be obvious. Applicants assert that the modification of multiple different systems in a combination is not obvious to one of ordinary skill in the art. Such modifications to the combined devices are not obvious to one of ordinary skill in the art without hindsight, which is not permitted in determining obviousness. For all of these reasons, Applicants assert that the prior art references and their combination do not teach or suggest the recited invention.

Moreover, claims 1 and 30 have been amended to further clarify the present invention. Claims 1 and 30 recite that the sensor assembly detects a sequence of alternating stereoscopic images. The claims further recite that the processing unit selects corresponding portions of the alternating stereoscopic images and compensates for detected movements. The prior art neither teaches nor suggests such compensation of alternating images as is done by the present invention. Applicants assert that the present invention provides for a stereoscopic image that eliminates distortions due to vibrations such as, for example, the shaking of the human hand. The prior art is directed to solving different problems and any combination of prior art neither teaches nor suggests the device and method recited in claims 1 and 30.

Claims 2, 4-5 and 33-35 were rejected as being unpatentable over Takahashi and Suzuki in view of Adelson. For the reasons stated above, Applicants assert that claims 1 and 30 are allowable. Adelson fails to remedy the shortcomings of the combination of Takashi and Suzuki. Therefore, Applicants assert that claims 1 and 30 and the claims depending therefrom, also patentably distinguish over any combination of Takahashi, Suzuki and Adelson for at least the same reasons.

Claim 36 was rejected under 35 U.S.C. § 103(as) over the combination of Takahashi, Suzuki and Adelson and further in view of Watanabe. Claim 36 depends from claim 30 and is believed to be allowable for the same reasons. Moreover, Applicants assert that Watanabe fails to remedy the shortcomings of Takahashi, Suzuki and Adelson. Therefore, Applicants assert that claim 36 is allowable for the same reasons as well as others.

Claim 40 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi, Suzuki and further in view of Watanabe. Applicants assert that claim 30 is allowable over the combination of Takahashi and Suzuki as discussed above. Moreover, Watanabe fails to address the shortcomings of the combination of Takahashi and Suzuki. Therefore, Applicants assert that claim 40 is allowable for the reasons discussed above as well as others.

Claims 6-8 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi and Suzuki in view of Watanabe. Applicants assert that claim 6 depends from claim 1 and is believed to be allowable over the combination of Takahashi and Suzuki as discussed above. Moreover, Watanabe fails to address the shortcomings of the combination of Takahashi and Suzuki. Therefore, Applicants assert that claims 6-8 and 11 are allowable for the reasons discussed above as well as others.

Claims 16 and 21-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi and Suzuki in view of Watanabe. Applicants assert that claim 16 depends from claim 15 which is believed to be allowable over the combination of Takahashi and Suzuki as discussed

above. Moreover, Watanabe fails to address the shortcomings of the combination of Takahashi and Suzuki. Therefore, Applicants assert that claims 16 and 21-22 are allowable for the reasons discussed above as well as others.

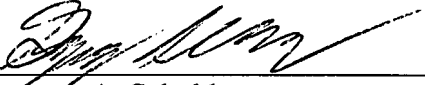
New claims 41 and 42 have been added to further clarify the present invention and distinguish over the prior art. Claims 41 and 42 recite that the alternating stereoscopic images alternate between a left image and a right image. Applicants assert that the prior art fails to teach the system of claim 1 and the method of claim 30 and further fail to address compensation in creating left and right stereoscopic images. Applicants assert that the present invention provides clear images for viewing while eliminating the distortion due to vibration. Applicants assert that the prior art fails to teach or suggest the recited invention.

A speedy and favorable action on the merits is hereby solicited. If the Examiner feels that a telephone interview may be helpful in this matter, please contact Applicant's representative at (612) 336-4728.

Respectfully submitted,

MERCHANT & GOULD P.C.

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